



Additional chart coverage may be found in CATP2, Catalog of Nautical Charts.

SECTOR 9 — CHART INFORMATION

SECTOR 9

COASTS OF CHILE AND ARGENTINA SOUTH OF ESTRECHO DE MAGALLANES AND TIERRA DEL FUEGO

Plan.—This sector describes the archipelago S of the W part of Estrecho de Magallanes (Strait of Magellan) and the waters S of Tierra del Fuego. From Cabo Deseado SE to Cabo Falso de Hornos, then NE to Cabo San Pio and the E entrance to Canal Beagle, then W to Canal Cockburn and its adjacent islands and inlets.

General Remarks

9.1 See Pub. 124, Sailing Directions (Enroute) East Coast of South America for a description of the approaches to Estrecho de Magallanes.

The SW coast from Cabo Deseado to Cabo Falso de Hornos, 300 miles SE, is composed of a large number of islands. It is generally high, bold, and free of shoals and banks, but there are many rocks, nearly awash, some of which lie 6 miles from the nearest coast.

From a distance this coast appears high, rugged, covered with snow, and continuous as if there were no islands, but on a near approach, many islands are seen which intersect the land in every direction, and open into large gulfs or sounds within the seaward islands. The high land, covered with snow, now disappears behind the coastal hills, the latter being thickly wooded toward the E, though barren, on their W sides, owing to the prevailing winds. These hills are seldom covered with snow.

Ice.—In coastal waters, sea ice is not normally encountered, but on rare occasions it may form in the shallow portions of some inlets, during abnormally cold spells in mid and late winter. The SE flowing currents off the W coast of Chile tend to keep the water temperature in the various inlets and channels above freezing.

Some of the channels and inlets possess glaciers, which calve and produce ice which is a danger to navigation. Channels prone to this problem will be identified in the text.

Tides—Currents.—Little detailed information is available concerning the currents along the S coast of Chile. It would seem that S of about latitude 50°S., the current is predominantly S and then SE following the coast. From the few observations available it would seem that the tidal currents off the coast between Cabo de Hornos and Cabo Pillar appear to be weak in relation to the coastal current. Tidal currents will be described along with the feature they affect.

Anchorage.—The best anchorages, where good holding ground exists, are on the W side of high land, protected from the sea by low islands. Good anchorages on the E side can be found, but they are usually exposed to heavy squalls from the high land. Where the land is chiefly composed of sandstone or slate, anchorages abound, but where it is composed of granite it is difficult to strike soundings.

The difference between the granite and slate and sandstone hills can be distinguished by the former being very barren and rugged, and of a grey or white appearance, whereas, the latter

are dark colored, covered with vegetation, and have smoother outlines.

Cabo Deseado to Cabo Tate

9.2 Cabo Deseado (52°45'S., 74°43'W.) forms the NW extremity of Isla Desolacion. The cape is low and submerged rocks extend 0.7 mile from it. Pico Adam, 3 miles SE of Cabo Deseado and 847m high, is prominent and makes a good landfall. Rocas Apostoles, from 1 to 15m high and fringed with breakers, lie on a reef which extends 2 miles off the cape.

Caution.—A submarine exercise area, the limits of which are shown on the chart, is centered about 27 miles NW of the cape in the approaches to the W entrance of Estrecho de Magallanes.

Caleta Mataura is entered between Cabo Mataura (52°49'S., 74°40'W.) and a point 0.5 mile N. The cove is deep, but open to W winds and cannot be recommended. Anchorage may be obtained about 1 mile ENE of Cabo Mataura, the S entrance point, in a depth of 35m, sand.

Puerto Loberos (52°51'S., 74°35'W.) is an inlet entered midway between Cabo Mataura and Punta Chancery, 3.2 miles SE. Numerous rocks and breakers exist near the entrance, and the head of the inlet is encumbered with rocks and patches of kelp. The swinging room is restricted and the anchorage is open W. Local knowledge is required. Rocas los Jueces lie on a reef up to 3.5 miles NW of Punta Chancery, there are many breakers near these rocks.

Bahia Dislocacion lies 2.5 miles SE of Punta Chancery. The bay is unsuitable for vessels, except as a refuge when in distress. Islas Cotesworth lie about 5 miles SSE of Bahia Dislocacion and nearly 1 mile offshore. The channel between these islands and Isla Desolacion has not been surveyed. Bahia Barrister, about 12 miles SE of Bahia Dislocacion, is also unsuitable for vessels, as it is encumbered with foul ground, and is exposed. Roca Lee, a prominent above-water rock, and Isla Black lie about 2.5 miles off the coast between the entrance to Bahia Dislocacion and Islas Cotesworth.

Puerto Saturday lies about 8 miles SSE of Bahia Barrister and in the channel between Isla Monday and Isla Tuesday. It affords a secure and snug anchorage to small vessels in a depth of 40m, with good holding ground, but access is difficult. Anchorage may also be obtained between Isla Tuesday and Isla Graves, in 21 to 25m, off a waterfall. The anchorage should be approached from the N, passing N of a 3.5m patch, marked by kelp, lying mid-channel 0.5 mile NNE of Isla Tuesday. There is an anchorage, in depths of 15 to 19m, in a large cove on the E side of Isla Monday.

Paso Murray (53°08'S., 74°17'W.) can be navigated without difficulty in its W part, N of Isla Graves and Isla Monday, but it is necessary to keep at least 183m off either shore. The E part of the pass is obstructed by many islets and rocks, which lie

between the NE end of Isla Monday and Grupo Friday, 1 mile E. Isla Graves is the largest of Islas Weeks and attains an elevation of 610m. Several rocks lie off the coast of the island.

Isla Recalada lies about 8 miles SSE of Isla Monday. Cabo Schetky, its S extremity, is a remarkable double-peaked promontory. Rocks, just awash, lie up to 1 mile S of this cape. Isla Inman is separated from the SW end of Isla Recalada by a narrow channel. Off Cabo Inman, the W extremity of the island, are several detached rocks on which the sea breaks violently giving them a formidable appearance.

9.3 Bahia Latitud (53°17'S., 74°14'W.), formed by the NW side of Isla Recalada and the NE side of Isla Inman, has depths of 13 to 31m. The bay affords good anchorage off the N entrance to the narrow channel between the two islands, but is somewhat exposed to the swell caused by strong NW winds. It is advisable to anchor as close as possible to the W shore, but not in depths of less than 18m, with an anchor laid out E in case the wind blows from that direction.

Within the channel between the two islands there is a secure and snug berth, with calm water, which is suitable for a vessel drawing less than 3.6m.

Bahia Otway lies NW of Isla Nunes and Islas Rice Trevor and SE of Isla Recalada. The bay should not be entered without local knowledge, as there are many islets and rocks in it, and it has not been surveyed. Passages lead from the bay to Estrecho de Magallanes through Seno Dynevor and Canal Abra.

Puerto Gonzales (53°20'S., 73°47'W.) is the larger and E of two small bays on the N coast of Isla Childs. The port affords good anchorage for vessels with local knowledge in depths of 16 to 18m, sand and shells, good holding ground. The port is recommended as a harbor of refuge.

Canal Abra is entered at the E end of the head of Bahia Otway. It is a good navigable channel, but has not been completely surveyed. Canal Maule leads 8 miles SE from Bahia Otway to the head of Seno Profundo. The channel is deep, but it has a bend which can not be taken by vessels over 59m in length. Canal Evans, which separates Isla Evans from Islas Rice Trevor to the E, is unsurveyed.

Cabo Tate (53°38'S., 73°51'W.) is the SW extremity of Isla Nunes. It is high and rounded at the summit. There are numerous clusters of rocks off its W and N sides, known as Rocas College, which extend up to 8 miles NW of the cape. This part of the coast is very dangerous and should be avoided.

Cabo Tate to Isla Noir

9.4 Seno Profundo (Hondo) is entered between Cabo Tate and the SW end of Islas Fincham, 8 miles SE. The inlet is studded with rocks and for the most part unsurveyed. It contains no anchorage. Islas Rice Trevor form a large and compact group at the head of the inlet.

Puerto Almirante Martinez is a cove on the S side of Punta Ragged (53°46'S., 73°34'W.), affording anchorage to vessels of moderate size. The harbor has not been fully surveyed. Vessels should steer so as to pass W of Rocas del Medio and then E to some prominent rocks lying near the coast. When the latter rocks have been passed, the cove opens out.

Seno Langford (53°49'S., 73°25'W.) is entered between islets and rocks, which extend from the N side of the W entrance

to Paso Wakefield, and Punta Ragged. The inlet is encumbered with islets and rocks, and has not been surveyed. The whole of this coast is known as Costa Inabordable. It is exposed to W winds and no vessel should approach it.

Cabo Gloucester (54°04'S., 73°28'W.) is the W extremity of Isla Carlos and is a remarkable promontory which cannot be mistaken. A rock, on which the sea breaks, lies 1 mile WNW of the cape, but there are no other known dangers and the cape can be passed fairly close.

Bahia Euston lies on the SE side of Isla Carlos. The bay, 2 miles wide, forms the approach to Seno Laura. Anchorage is obtainable for large vessels, in depths of 10 to 35m. The bay is only exposed to SE winds, which seldom blow hard. This anchorage is considered one of the best in the vicinity.

Seno Laura is a small inlet on the SE side of Isla Carlos. There are three small arms on the W side of the inlet. The S arm, known as Estero La Darsena, lies 1 mile within the entrance, and is only suitable for small vessels, which can anchor, in depths of 9 to 16m.

9.5 Bahia Hope (54°07'S., 73°04'W.) lies on the NE side of Isla James and affords anchorage to vessels with local knowledge. The best anchorage is with the N entrance point bearing 023°, in depths of 14 to 20m. There is some kelp in the entrance to the bay, but it does not indicate any danger.

Bahia Bolivar lies between the N end of Isla Isabella (54°11'S., 72°56'W.) and the E side of Isla Libertad. Good anchorage is afforded to vessels with local knowledge, in a depth of 11m. The bay has been reported to be unsurveyed.

Paso Wakefield (54°03'S., 73°08'W.), 2 miles wide, separates Isla Santa Ines and Islas William from Islas Grafton. At times the pass has been used by vessels, and appears to present no particular difficulty. There are several anchorages in the passage between the islands, but the best and easiest of access is in Bahia Euston.

Bahia Stokes is an almost unsurveyed bay, strewn with dangerous reefs, formed by several islands lying off the SW part of Isla Santa Ines. It is entered between Islas Agnes and Rocas Kennel (54°17'S., 72°59'W.). At the head of the bay Canal Gonzalez connects NE with Canal Barbara.

Isla Santa Ines rises to a prominent snow-capped summit, 1,341m high, at the SE part of the island.

Isla Noir (54°29'S., 73°01'W.) lies about 15 miles SSW of Bahia Stokes. Rada Noir, located on the E side of the island, is an excellent roadstead. Anchorage can be obtained here, secure from all W winds, in depths of 26 to 27m, over a clear sandy bottom. A below-water rock lies in the NE part of the roadstead. Islotes Torres lie about 7 miles S of Isla Noir and can be passed moderately close on either side.

Isla Noir, 182m high, was reported to be an excellent radar target at a distance of 42 miles. Sealers have been known to visit the island during the season of moderate weather.

Isla Noir to Bahia Desolada

9.6 Islas Agnes (54°19'S., 72°40'W.) lie on the SE side of the outer part of Bahia Stokes. The islands form a chain from 2 to 11 miles WNW of the NW extremity of Isla Kempe. Numerous above and below-water rocks lie up to 6 miles S of Islas

Agnes. The islands are unsurveyed, unexamined, and should only be approached in good weather and with local knowledge.

Isla Lort lies 3 miles N of Islas Agnes. The cove on the SE side of the island is spacious, and affords good shelter to vessels with local knowledge. There are two narrow passages into the cove and they are well-defined by kelp. Anchorage may be obtained in the cove, where depths vary from 18 to 30m, good holding ground. Isla Lort should only be approached in good weather and with local knowledge.

Rocas Neptuno lie 4 miles NE of Isla Noir; Rocas Jupiter lie 6 miles WSW of Cabo Kempe (54°23'S., 72°32'W.). This area should be avoided, as little is known of it and it is extremely dangerous to shipping.

9.7 Paso Aviador Ibanez (54°18'S., 72°22'W.) is an unsurveyed channel which extends 9 miles NE from the NW extremity of Isla Kempe (54°21'S., 72°25'W.). Its narrowest part is between Isla Mortimer and Islas Dora, 1 mile NW. There is an anchorage, for vessels with local knowledge, off the E side of Islas Dora, in depths of from 15 to 18m, sand and mud.

Puerto Skyring is an extensive bay NE of Isla Skyring (54°24'S., 72°08'W.) and S of Isla Adelaida. The best anchorage is in the SW corner of the bay where the depth is less and the bottom is sand and rock. There is an anchorage for small vessels with local knowledge, on the NE side of Isla Bynoe, 4 miles NW of Bahia Adelaida (54°22'S., 72°05'W.).

Isla Adelaida lies close off the NE extremity of Isla Skyring. Bahia Adelaida, a small bay on the NE coast of the island, affords two anchorages. One is in a cove on the S side of the bay, in a depth of 25m, sand, and the other is on the N side of the bay in a cove which is longer and narrower than the first with a depth of 15m, mud in the middle.

Seno Melville (54°22'S., 72°14'W.), in the middle of the group, is formed by Islas Furias, Skyring, and Adelaide to the S, and by Islas Kempe, Mortimer, and Bynoe to the W and N. It is encumbered with islets and rocks, and is unsurveyed. The E entrance to Seno Melville is in Paso Adelaida at the S end of Canal Barbara.

Islote Barcaza is a barren islet, 7 miles SSW of Bahia Furia. Above and below-water rocks lie N, E, and S of Islote Barcaza and can best be seen on the chart. The passages between the islets and rocks lead to the SW entrance to Canal Cockburn.

Canal Cockburn

9.8 Canal Cockburn runs in a generally E direction for some 40 miles following the outline of Peninsula Brecknock of Tierra del Fuego, which it separates from the S coasts of Islas Henry, Clavel, Vidal Gormaz, Clarence, Seebrock, Diego, and Capitan Aracena. It then joins Canal Magdalena and Estrecho de Magallanes, which are described in Pub. 124, *Sailing Directions (Enroute) East Coast of South America*.

Canal Cockburn crosses a mountainous area and its coasts are irregular. The channel is wide and very deep and offers no problems to navigation, except at its ocean mouth where numerous groups of rocks and islets make its navigation dangerous.

In the E part of the channel heavy overfalls are encountered to the N and S of Islas King and Fitz Roy, because of the narrowing of the channels.

The canal is entered between Isla Furia and Isla Aguirre, 8 miles SE. The rocks in the approach to the canal should only be passed during daylight and in clear weather.

Canal Cockburn—South Side

9.9 Seno Chasco (54°28'S., 71°50'W.) is 15 miles long and opens SSE of Isla Vidal Gormaz. The S arm of Seno Chasco, and an unnamed sound from Paso Brecknock, form the base of Peninsula Brecknock.

Canal Ocasión (54°33'S., 72°00'W.) separates Isla Aguirre from Peninsula Brecknock to the E. It is convenient for vessels wishing to avoid the heavy seas which may be encountered at the NW entrance to Paso Brecknock, but local knowledge is necessary. The channel should be navigated at a moderate speed.

Paso Brecknock is entered between Isla Aguirre and Isla Astrea. It has a least width of 183m in Paso Aguirre and leads 25 miles E to the W side of Bahia Desolada. The shores of the passage are barren, mountainous, and desolate. The tidal currents in the pass, although they cannot be called a hazard, are appreciable in the E part, and eddies and tide-rips may be met, especially in Paso Aguirre. The flood tide which flows E is stronger than the ebb.

Islotes Nelson (54°39'S., 74°52'W.) lie on the N side of Paso Brecknock, 9.5 miles SE of the entrance. There are numerous rocks around the islets. The closest to the fairway lies 183m S of the southernmost islet. Temporary anchorage may be taken, in a depth of 36m, mud, off the E end of the largest islet. A light is shown from a rock SW of the island.

Islas Kirke (54°22'S., 71°44'W.) lie in the middle of the channel near the entrance to Seno Brujo. They are steep-to and rocks extend 0.2 mile N from them. There is a 12.8m shoal about 3 miles WSW of the islets.

Seno Brujo is entered about 2 miles SE of Islas Kirke. It has many branches and is full of islets and reefs.

Islote Petit (54°24'S., 71°40'W.) lies near the middle of the entrance. A rock, awash, with an 18m shoal close SW, lies 0.5 mile NNW of the islet. The inlet offers only one anchorage in Puerto Alegria, at the head of the S arm. It is just over 0.5 mile in diameter and affords good anchorage, in a depth of 20m, mud. Local knowledge is required.

Isla Prowse is opposite the entrance to Seno Sargazos and is 3 miles long from W to E. Islote Horacio lies off its N coast, close to its W point. About 45m W is an islet surrounded by kelp. One mile E of the E end of Isla Prowse is Isla Reyes, and 1.3 miles NE of the latter is the W extremity of Isla Amaya.

Seno Sargazos lies S of Isla Prowse, between Peninsula Juan to the E and Peninsula Rolando to the W. There is no anchorage in this sound.

Seno Bluff is entered between the W end of Isla Amaya and Isla Reyes. There are some unnamed islands S of the former, SE of the latter and right in the entrance. Seno Bluff is 8 miles long with numerous bays along its coasts with anchorages in two of them. Puerto Tanteo is near its entrance, on the SW coast. It is sheltered, but narrow, with space for only one small vessel which can anchor NW of a small beach at its head in

18m of water. Puerto Saco is at the head of Seno Bluff. It is a circular basin, apparently free from dangers, with an anchorage for small vessels a little S of its center, to the W of the outflow from a small lake located in a valley which opens to the E. The depth at this anchorage is 20m.

Isla King (54°22'S., 71°17'W.) rises 6 miles from the E end of Canal Cockburn and to the W of it are Rocas Simmons and Islote Fitz Roy. The channel turns N of these islands and the passage is wide and deep. Passing to the S is not recommended, as it is narrow and the currents are strong. Isla King Light is on the E end of the island.

Puerto Ideal (54°26'S., 71°11'W.) is on the S coast of Canal Cockburn, about 4.5 miles SE of Isla King Light. It is marked by an islet in its middle, 1 mile within. There is good anchorage near its head, in a depth of 26m, mud.

Canal Cockburn—North Side

9.10 Bahía Furia, entered at the S end of Isla Furia, affords little shelter and bad holding ground.

Puerto Tom lies on the SE coast of Isla Skyring and between it and Isla Henry. The anchorage is good and sheltered, except from the violent gusts which come down from the adjacent heights which are common throughout the region. The anchorage is protected from the SE by Isla Henry and from the SW by a group of unnamed islets on the NW side of the entrance to Canal Cockburn.

Islas Clavel lie about 2.5 miles NE of Isla Henry. A light is shown on the SE side of Islas Clavel.

Isla Vidal Goemaz lies 1.5 miles NE and has distinctive summits named Titas de Calderon. Isla Enderby lies about 0.4 mile NW.

Canal Barbara joins Canal Cockburn between the SE extremity of Isla Clarence and Isla Henry. Isla Vidal Gormaz, Isla Enderby, and Isla Clavel divide it into three passes; Paso Adelaida is the N pass, Paso Aguila is the central pass, and Paso Sur is the S pass. Canal Barbara connects with Estrecho de Magallanes, but its use is not recommended as it is difficult to navigate due to numerous obstacles.

Puerto Niemann (54°20'S., 71°55'W.) is situated on the S coast of Isla Clarence. It is used by small craft requiring fresh water. The entrance channel, with an average depth of 40m, is 183m wide, straight, and free of dangers. The harbor is sheltered from winds of all directions and there is no swell. A light is shown from the SE extremity of Isla Clarence.

Seno Duntze lies between the SE coast of Isla Clarence and the W side of Isla Seebrook. It is about 6 miles long and is obstructed by Islas Duntze. Most of Seno Duntze is unexplored, so that its navigation is not recommended.

Isla Seebrook (54°18'S., 71°42'W.) is the largest of several islands and islets which lie between the SE end of Isla Clarence and Isla Diego, 10 miles E. Isla Elisa, with Isla Baynes 0.5 mile NE of it, lies close off the E end of Isla Seebrook. Isla Alegria, with Isla Molly 0.2 mile SE, lies 0.1 mile NE of Isla Seebrook.

Seno Dyneley is entered between Isla Elisa and Isla Diego, 3 miles E. This sound runs inland for a total of 23 miles, into Isla Clarence, in a NW direction. It has not been surveyed N of Isla Alegria. It is joined to Seno Duntze by Paso Andrade Tarada, which runs N of Isla Seebrook.

Canal Engano is entered 2 miles NNE of the entrance to Seno Dyneley and separates Isla Capitan Aracena to the W. It is 4.5 miles long, 0.3 mile wide, deep and free of dangers, except at its N entrance which is strewn with shoals, which stop the passage of ships.

Small craft can anchor at the head of the channel, where it turns E, in a depth of 20m, sand and mud, good holding ground.

9.11 Puerto Barrow (Caleta Barrow) (54°20'S., 71°26'W.) is on the S coast of Isla Diego. It is entered between Punta Colombo and Punta Final, 0.3 mile WSW. A light is shown about 0.4 mile W of Punta Final. Puerto Barrow extends back for about 0.4 mile about both its head and W half are occupied by an extensive shoal where there are several sunken rocks and rocks awash. Anchorage for large vessels may be obtained in the middle of the entrance, in a depth of 22m. The anchorage is open to S winds. Small craft up to 20m in length, with a 1.5m draft, can anchor, in a depth of 16m, on the E side of the cove.

Seno Mercurio is entered to the E of Isla Diego and extends deeply, via several arms, into Isla Capitan Aracena. Little is known of Seno Mercurio and of its inner harbors. To the NW is Seno Prat, which borders the N coast of Isla Diego. Seno Prat takes a N direction and opens into three inlets. From W to E these inlets are Alda, Riquelme, and Uribe. Puerto Quidora is in Ensenada Riquelme, and Puerto Esmeralda opens 0.7 mile S of Ensenada Uribe. Ensenada Uribe lies at the NE end of Seno Prat, close NE of Puerto Esmeralda, on Isla Capitan Aracena. It runs ENE but only its first half is navigable as further passage is blocked by a 3m shoal. In general, it is narrow and shoal so its navigation is inadvisable. Anchorage is possible in this inlet, but is not recommended as W, SW, and NW winds are so strong and the inlet so narrow. Ensenada Riquelme, the center arm of Seno Prat, is 3 miles long and free from dangers, with depths between 16 and 36m. It is sheltered from all winds. Puerto Quidora at its N end is a beautiful bay, about 0.8 mile in diameter, with depths varying from 16 to 26m, so that it is a suitable anchorage for large vessels.

Puerto Soffia (54°17'S., 71°24'W.) is an excellent anchorage on the E side of Isla Diego. It extends NW for over 1 mile, and has a width of about 0.5 mile with depths of 30m half way up the inlet and 15m near its head. There are no hidden dangers and the holding ground is excellent consisting of sand, shells, and mud. Squalls which blow down the harbor are not very severe, as the surrounding land is only moderately high.

Bahía Park lies on the S coast of Isla Capitan Aracena, about 1.5 miles E of the entrance of Seno Mercurio. Although there are no sunken dangers inside it, there are rocks awash 0.2 mile S and close W of the entrance point. Islote Chulula lies 0.5 mile SW of the entrance. There are several islets off the E shore of the bay. The bay is exposed to the prevailing winds.

The best anchorage is in a cove W of the inner islet, in a depth of 22m, sand and mud, with patches of rock.

Another anchorage, in a depth of 30m, is between the inner islet and a point farther in. A belt of kelp nearby marks depths of 2 to 7m.

Bahía Stormy lies 6.5 miles SE of Bahía Park. There is a peninsula in the middle which divides it into two parts. From seaward this peninsula looks like an islet. The bay is unsuitable as an anchorage, as it is entirely open to the prevailing winds.

Bahia Warp is entered between Punta Raton and Cabo Turn, 1 mile E. It is exposed to the S. It affords temporary anchorage for small craft; local knowledge is required. It is necessary to anchor in the entrance, in a depth of 30m; farther in the depths are greater.

Isla Noir to Bahia Desolada (continued)

9.12 Isla London, the largest of Grupo Camden, lies NW of Punta Cuarzo (54°43'S., 71°52'W.), the NW extremity of Isla Sidney. It is separated from Isla Sidney by Paso Pratt. Puerto Townshend, on the SE end of Isla London, is entered from Paso Pratt. Anchorage may be obtained, in depths of 16 to 18m, in the middle of Puerto Townshend, 0.2 mile from the W shore. The holding ground is good, but strong winds from S and W descend from the hills in heavy squalls. There is little room to maneuver should the anchor drag, and vessels are advised not to remain overnight.

Isla Georgiana (55°40'S., 71°44'W.) lies on the S side of Paso Brecknock, 4 miles E of Islotes Nelson. Punta Vuelta, the NW extremity of the island is low, but there is a hummock on it. Isla Clementina, lies close S of Isla Georgiana; the passage between the islands is unsurveyed.

Isla Basket lies 4.5 miles SE of Isla Georgiana. Caleta Basket is a small bay on the NE side of the island and can easily be identified by a deep defile, which can be seen high up in the hills opposite. Small vessels may obtain anchorage, in a depth of 20m, in the middle of Caleta Basket. There are a number of rocks, shoals, and islets, to the S, SE, and SW of the island, and can best be seen on the chart.

Isla Brecknock (54°41'S., 71°33'W.) lies on the N side of Paso Brecknock, about 1 mile N of Isla Basket. The narrowest part of Paso Brecknock, known as Paso Aquirre, lies between Isla Macias and Cabo Atracadero, the SE extremity of Isla Brecknock. A light stands on the cape.

Bajo Bevan, with a least depth of 0.9m, lies in mid-channel, 183m SW of Cabo Atracadero. At half-tide, Bajo Bevan is marked by patches of kelp, but at HW, there is no visible sign of the shoal. A lighted buoy is moored close SE of the 0.9m patch and marks the end of the shoal.

Isla Marsh (54°42'S., 71°30'W.) forms the S entrance point to the E end of Paso Brecknock. The island lies 2.5 miles E of Isla Macias. The passage between the two islands is foul.

Bahia Desolada

9.13 Bahia Desolada lies close E of Isla Marsh. The bay is open to the sea from the SW. There are many islets and dangers; however, vessels with local knowledge can proceed across the head of the bay from Canal Ballenero to the E entrance of Paso Brecknock. The head of the bay extends 7 miles ESE from the S part of Peninsula Edwards to Isla Burnt. The tidal currents in the bay are weak.

Isla Gorda (54°41'S., 71°25'W.) lies in the NW part of Bahia Desolada and forms the N entrance point to the E end of Paso Brecknock. Puerto Estrecho lies between the SW side of Isla Gorda and two islets close off the island. The port is open to the SE and affords anchorage to small vessels, in depths of 29 to 40m, sand and gravel, fair holding ground.

Puerto Langlois, on the E side of Peninsula Edwards, is entered between Cabo Saliente (54°39'S., 71°24'W.) and a point 0.7 mile W. Anchorage may be obtained by vessels with local knowledge near the head of the inlet, in a depth of 24m, soft bottom, but the inlet is not recommended because of better conditions obtainable in Puerto Edwards.

Puerto Edwards (54°40'S., 71°27'W.) is entered between the W entrance point of Puerto Langlois and Punta Abrigo, 0.7 mile SW. Grupo Jorge lies in the middle of the entrance. Vessels of moderate size may obtain good anchorage, in a depth of 37m, 0.3 mile WNW of the largest islet of Grupo Jorge. A vessel should approach Puerto Edwards from the S, passing between Isla Gorda and Peninsula Edwards and steer for Cabo Saliente. When the largest islet of Grupo Jorge bears 270°, course should be altered W to pass S of the islet and 183m NNE of Punta Abrigo, then a NW course should be steered for the anchorage. The passage N of Grupo Jorge should not be attempted.

Islote Direccion (54°43'S., 71°21'W.) lies in the middle of Bahia Desolada, on the S side of the fairway. A light is shown from the islet. Islote Entrada, located close N of Isla Marsh, also shows a light.

Seno Courtenay (54°35'S., 71°17'W.) is entered between Cabo Saliente and Cabo Fletcher, 4 miles farther E. The sound extends 9 miles N from the head of Bahia Desolada and is little known and unsurveyed. The entrance and the sound itself is studded with rocks and islets.

Canal Ballenero—North Side

9.14 Isla Burnt (54°44'S., 71°14'W.) lies 3 miles E of Islote Direccion Light. A light is shown from the SW point of the island. Caleta Burnt lies in the channel separating Isla Burnt and Isla Smoke, 0.5 mile E. Anchorage may be obtained, in a depth of 20m, good holding ground, 0.3 mile NW of the W extremity of Isla Smoke, but this berth is restricted. Another berth is reported to be in a depth of 20 to 26m, SE of Isla Burnt, with the NE point of the island bearing 330°, 183m off the W extremity of Isla Smoke.

Caleta Ancha, located 0.5 mile NNE of the S extremity of Isla Burnt affords anchorage, in a depth of 25m. When approaching the anchorage from W, the S extremity of the island should be rounded at a distance of not less than 0.7 mile, in order to clear all dangers. Caleta Ancha is suitable for all size vessels. A shoal, with a least depth of 8.5m, marked by kelp, lies about 183m E of the recommended berth.

Seno Ladrones (54°40'S., 71°03'W.) is an extensive inlet NE of Isla Smoke, Seno Alfredo, and Seno Searle lie E of Seno Ladrones, and although extensive, little is known about them.

Puerto Util (54°51'S., 70°53'W.) lies off the SE extremity of Isla Grande. An islet lies on the outer end of a reef extending 0.1 mile E of this point. A 5.2m shoal, which is steep-to, lies 0.1 mile SSW of the same point. Anchorage is afforded S of the reef, in depths of 30 to 36m, with the S extremity of the islet bearing 025°, distant about 0.1 mile.

Grupo del Medio consists of Isla Grande, Islita Senal, and several smaller islets. A light is shown from the SW point of Islita Senal. Bajo Jimenez, with a depth of 3m, marked by kelp, lies 2.5 miles SE of Puerto Util.

Canal Ballenero—South Side

9.15 Isla Catalina (54°48'S., 71°13'W.) lies close off the middle of the N coast of Isla Stewart. Passage between the two islands is not recommended. Isote Vargas, 0.5 mile E of the NW extremity of Isla Catalina, affords anchorage off Caleta Vargas, in a depth off 30m.

Puerto Fanny lies about 3 miles SSW of Isla Grande and is entered between Punta Fanny and Punta Baja. A reef marked by kelp extends 0.2 mile NNE from Punta Baja. Anchorage may be obtained in the outer part of Puerto Fanny by vessels of moderate size, in a depth of 29m, 0.5 mile from the shore WSW of Punta Baja. A small beach at the foot of a high mountain may assist in the identification of the anchorage. The inner harbor is well-sheltered, but the bottom is irregular. Small vessels anchor here, in depths of 25 to 40m.

Isla Stewart (54°51'S., 71°09'W.) extends from Punta Walter, its E extremity, 20 miles to Cabo Emilia. The island is very indented and mountainous. Roca Blanca is a small islet, with kelp off its N side, 1 mile NE of Punta Walter.

Bahia Isabel, on the N side of Isla Londonderry, is entered between Punta Isabel and a point 1 mile NW of Punta Engano (54°56'S., 70°45'W.). In spite of its size, the bay is encumbered with numerous islets, rocks, and kelp, and is unsuitable for shipping.

Puerto Engano (54°56'S., 70°45'W.) is a cove on the N shore of Isla Londonderry, and is entered between Punta Engano and Punta Guerrico, 0.7 mile SSE. A beacon stands 0.1 mile SW of Punta Engano and a second beacon stands on a prominent rock about 0.2 mile SSW of the first beacon. Anchorage for large vessels may be obtained, in a depth of 27m, 0.3 mile S of Punta Engano. There is also anchorage, in depths of 20 to 25m, 183m from the NW shore of the cove.

Bahia Rosa (54°53'S., 70°44'W.) lies about 2.5 miles SSE of Punta Engano. A beacon stands on the E entrance point to the bay. The bay should not be entered without local knowledge.

Canal O'Brien

9.16 Canal O'Brien (54°53'S., 70°25'W.) has a least navigable width of 0.3 mile and a least known depth in the fairway of 18m. In general, all shoals are marked by kelp.

Note.—At the W end of Canal O'Brien, between a position 2.2 miles E of Isla Redonda Light (54°55'S., 70°37'W.) and a position 1.2 miles WSW of that light, it is forbidden for a vessel to pass another proceeding in the opposite direction or to overtake another proceeding in the same direction. A vessel approaching Canal O'Brien from the W, on hearing a warning signal or otherwise verifying the presence of a vessel approaching from the E, must wait about 1.3 miles SW of Isla Redonda Light until the westbound vessel has passed.

Caution.—It has been reported that the W portion of Canal O'Brien is incorrectly oriented and mariners should proceed with caution.

Isla O'Brien (54°51'S., 70°32'W.), which forms the N shore of Canal O'Brien, extends 14 miles E from Punta Pinto to Punta Americano. The whole island is mountainous and Monte Fantasma in the middle of the island is very prominent.

Islita Redonda, which marks the W end of Canal O'Brien, lies close off the S extremity of the island. A light is shown on the islet. Depths of 6 to 10m were reported about 1 mile SSW and a depth of 12m 0.7 mile SSE of the islet. A shoal, with a depth of 8.4m, lies 1.2 miles SSW of the island, while a bank with a least depth of 45m lies between the shoal and Isla Guillermo. This part of the canal must therefore be navigated with great caution. A recommended track passed 0.5 mile S of the islet.

Caleta Canales (54°54'S., 70°36'W.) lies 0.7 mile NE of Islita Redonda and offers fair shelter to vessels with local knowledge. Kelp grows in abundance in the cove, especially on the W side. Anchorage is afforded 0.7 mile E of Islita Redonda Light, in a depth of 24m, sand and shells.

Surgidero Fantasma located on the N side of Canal O'Brien, 3 miles ENE of Caleta Canales, affords temporary anchorage in good weather for small vessels with local knowledge. The anchorage, which is in a depth of 18m, 183m offshore due S of Monte Fantasma, can be identified by a large rock on the hillside almost level with the tops of the trees nearby. The anchorage is completely open to winds from the E and W which blow along the canal. A shoal, with a depth of 6.4m, marked by kelp, lies close NW of the berth.

9.17 Puerto Fortuna (54°53'S., 70°25'W.) is a small cove on the S side of the canal, 3 miles E of Surgidero Fantasma. There is a well-sheltered anchorage in the middle of the cove, in a depth of 22m. The cove is used mainly by small vessels with local knowledge.

Canal Pomar separates the N side of Isla O'Brien from Tierra del Fuego. Its W entrance is encumbered by islets and rocks, leaving a narrows known as Angostura Pomar, only 183m wide. Passage through Canal Pomar is prohibited, but there are two emergency anchorages which can be approached from the E.

Puerto Almeida (54°50'S., 70°39'W.) lies on the S side of Canal Pomar, 4 miles NE of the W entrance. There is good anchorage, in a depth of 18m, about 0.3 mile SE of the W entrance point of the cove. The head of the cove is foul.

Puerto Ballenas (54°50'S., 70°33'W.), on the S side of Canal Pomar and 1 mile wide, is entered 7 miles W of Punta Americana. The middle of the bay is deep, but anchorage may be obtained, in depths of 15 to 20m, in the SW corner. Because the bottom is indifferent, a long scope of cable is advised.

Seno Ventisquero lies N of the E entrance to Canal Pomar and is entered E of Punta Verde (54°50'S., 70°20'W.). The inlet is deep and narrow, and affords no anchorage. A vessel found anchorage about 0.1 mile off the inlet's E shore, in a depth of 70m, mud bottom, about 1.8 miles N of the entrance. The holding ground proved good in N winds of 40 knots. At its head is a large glacier, of which portions drift down the inlet and are carried E through Seno Darwin by the current.

South Coast of Isla Stewart to Bahia Cook

9.18 Bahia Stewart (54°54'S., 71°25'W.) is an excellent anchorage off the W coast of Isla Stewart, 2.5 miles N of Cabo Castlereagh. The harbor consists of three openings and is easy of access. The best afforded anchorage for small vessels is in depths of from 9 to 11m, 0.2 mile N of the two rocks which dry.

Bahia Parker King extends SW from Paso Adventure to the open sea. Its W entrance point lies 4.5 miles E of Cabo Castle-reagh (54°56'S., 71°25'W.). The bay is easy to recognize from seaward by Pico Stewart in the background. The bay offers no anchorage.

Paso Adventure (54°57'S., 71°06'W.) runs in a W to E direction for about 17 miles. It stretches from Bahia Parker King to the SE end of Canal Ballenero. In general navigation throughout is not difficult as all known dangers are marked by heavy kelp. Local knowledge is recommended when using this passage.

Islas Gilbert, consisting of two islands surrounded by many islets and rocks, forms the SW part of Paso Adventure. Caleta Doria lies on the NE side of the E island and affords anchorage for small vessels just within the entrance, in a depth of 24m.

Bahia Fiasco (54°52'S., 71°13'W.) lies near the middle of the S coast of Isla Stewart, 3 miles W of Pico Stewart (54°53'S., 71°07'W.). Puerto Piloto Sibbald, a circular basin 0.3 mile in diameter at the NE head of Bahia Fiasco, is entered through a channel 183m wide and affords anchorage, in a depth of 27m, sand and rock. Facing the anchorage on the N shore is a large waterfall.

Bahia Fitzroy lies 2.5 miles ESE of Caleta Doria. The bay is entered between the W end of Isla Londonderry and the E side of Islas Gilbert. The bay leads from the sea to Paso Adventure and appears to be free of dangers, although the bay is poorly surveyed.

Grupo Londonderry (55°07'S., 70°40'W.), consists of Isla Londonderry, the coast of which is much indented, and numerous islets and rocks. This intricate group has been only partially surveyed and no anchorages can be recommended. Isla Londonderry extends 27 miles from its W extremity to Bahia Cook. Rocas Phillips is the S of the group and should be given a wide berth, as they are low and dangerous.

Bahia Cook lies E of Grupo Londonderry and W of Isla Hoste. The bay has not been thoroughly surveyed and should be approached with caution. It would appear to be free of dangers along the usual track, no kelp or sunken rocks which break have been sighted, and Rocas Cabrestante (55°22'S., 70°10'W.) forms the only known danger. It can be regarded as the best landfall for a vessel coming from sea to Canal Ballenero and Canal Beagle.

Seno Darwin

9.19 Seno Darwin leads E for a distance of about 15 miles between the E entrance point of Canal O'Brien and the W entrance point to Brazos del Noroeste. In the summer Seno Darwin is encumbered with ice-flows from the many glaciers in the region. The N shore of Seno Darwin is high and precipitous, with a range of mountains that are snow-clad all year round.

Isla Timbal Grande (54°53'S., 70°16'W.) is located about 1.5 miles NE of the E extremity of Isla O'Brien. Its E and W ends are low, and some of the high ground is nearly covered with vegetation. The N coast is nearly clear of dangers and the S coast is fronted by rocks and islets, between which kelp is visible.

Isla Darwin lies on the S side of Seno Darwin, about 4 miles SE of Isla Timbal Grande. The W end of the island borders on

Canal Thomson, which empties into Bahia Cook. Puerto Huemul (54°54'S., 70°07'W.) is a small, sheltered, cove on the NE side of the island. An islet is located 0.2 mile within the entrance on the E side of the head of the cove, which is shallow. Anchorage is afforded 183m or more N of the islet, in depths of 30 to 40m.

Isla Chair (54°52'S., 70°03'W.) lies in the middle of Seno Darwin, about 3 miles NNE of Isla Darwin. The N coast of the island is steep-to, but Rocas Chair and Islote Montenares extend up to 0.7 mile off the NW corner of the island. A light is shown on Islote Montenares.

Seno Garibaldi lies on the N side of Seno Darwin, about 3.5 miles NE of Isla Chair. A rock, with a depth of 11m, lies 0.5 mile ENE of Punta Tempanos, the W entrance point. There are two anchorages, the outer of which has a depth of 18 to 22m, and is located 0.5 mile N of Punta Tempanos. Puerto Garibaldi, the inner anchorage, lies 0.2 mile off the W shore, 3.5 miles N of the entrance, in a depth of 16m, good holding ground. On the coast abreast of Puerto Garibaldi, there is a prominent wall-like rock, with inscriptions on it. Navigation N of Puerto Garibaldi is not recommended, because of shoal water and dangers.

Brazo del Noroeste

9.20 Brazo del Noroeste lies between Tierra del Fuego and the N coast of Isla Gordon. It extends 28 miles from Seno Garibaldi to the E extremity of Isla Gordon. It is deep throughout and free of dangers. Some of the ravines and valleys on the N shore are occupied by immense glaciers, which sometimes descend to the shore where blocks of ice may be broken off, to be carried away by the current. The current in the passage runs E at a moderate rate. Violent squalls descend from the hills in the region.

Bahia Tres Brazos (54°54'S., 69°46'W.) is an extensive inlet on the S side of Brazo del Noroeste. Two miles inside the bay, there are several islets, S of which the bay divides into three arms. Anchorage may be obtained for small vessels, with local knowledge, in a cove on the E shore, 2 miles within the entrance. On the N shore of Brazo del Noroeste, opposite Bahia Tres Brazos and Caleta Voilier, there are two extensive unnamed inlets which have not been surveyed. The E inlet is blocked by an above-water rocky ridge within its entrance.

Caleta Voilier (54°52'S., 69°39'W.) lies on the S side of the channel, 5 miles E of the entrance to Bahia Tres Brazos. The cove may be identified by a sugar-loaf on its E side. General depths are from 16 to 20m, but foul ground extends 0.1 mile off the W shore. Anchorage is afforded for small vessels with local knowledge, in a depth of 18m, with the entrance points of Caleta Voilier bearing 310° and 055°.

Bahia Romanche, on the S side of the channel, is entered 6 miles ESE of Caleta Voilier. The entrance can be identified by being opposite two large glaciers on the N shore of the channel. Caleta Morning lies close within the entrance to the bay on the W side. Caleta Evening, at the head of the bay, has depths of 49m. Anchorage may be obtained in Caleta Morning, in depths of 20 to 22m, in the middle of the cove.

An alternative anchorage is 2.5 miles within the entrance to Bahia Romanche, before the bay turns W, in a depth of 27m, with a sharp peaked mountain 899m high, located 2.2 miles SSW of the W entrance point bearing 302°, distant 0.9 mile.

Caleta Olla (54°55'S., 69°10'W.) lies on the N side of the channel, about 1.8 miles NNW of Punta Divide. It is formed by a small peninsula which shelters it from S and W winds. Good anchorage for small vessels with local knowledge can be obtained in the cove, in a depth of 22m. Large vessels can anchor outside the cove, E of the small peninsula, in a depth of 25m.

Care is necessary to avoid a sandbank, with a depth of 3.4m at its outer end and marked by kelp, which extends 0.5 mile SSE from the E entrance point.

Brazo del Suroeste

9.21 Brazo del Suroeste, the continuation of Canal Beagle, leads ENE between Isla Hoste and Isla Gordon for 32 miles, from Cabo Kokblao to Punta Divide, with a least width of 0.3 mile. Tidal currents in this arm are very strong and cause numerous eddies. On either side of Brazo del Suroeste there are mountain ranges, and deep inlets in which there are glaciers.

Bahia Rafagales (55°07'S., 69°58'W.) lies on the S shore of Brazo del Suroeste, and is entered 2.5 miles NE of Cabo Kokblao. The bay is wide and spacious, but the entrance is encumbered by rocks and islets. Anchorage may be obtained in the bay by vessels with local knowledge, but it is not recommended.

Isla Delta and Isla Thomson lie close W of Isla Gordon, and are separated by Canal Barros Merino. This canal trends N for 9 miles to join Seno Darwin, SE of Isla Chair. Paso Occidental, between Isla Delta and Isla Olga, is only 0.2 mile wide. Both these channels appear to be free of dangers, the rocks near the shore being marked by kelp. They should not be used without local knowledge. Anchorage is afforded on the W side of Canal Barros Merino, 2 miles within the entrance.

Bahia Fleuriais (55°00'S., 69°30'W.), on the N side of Brazo del Suroeste, is entered 12 miles WSW of Punta Divide. From the bay, a deep inlet extends N, and a shallow one NW, at the head of the latter there is a glacier which does not reach the sea. Good anchorage is afforded in the bay, in a depth of 22m, with the E extremity of the islets bearing 221°, distant 0.6 mile.

Estero Fouque lies on the S side of the channel, about midway between Cabo Kokblao and Punta Divide. It extends 7.5 miles to the S, forming Peninsula Cloue to the W. The inlet is deep, but is of no use to shipping. In winter it freezes over.

Bahia Penhoat (55°02'S., 69°23'W.), on the S side of the channel, is entered 9 miles WSW of Punta Divide. It consists of two inlets, 3 miles long, running SE and SW, respectively. Its entrance can be identified by a long black rock, bare of vegetation, close off the E entrance point. The bay is of no use to shipping.

Canal Beagle—Punta Divide to Islotes Eclaireurs

9.22 Note.—For information on pilotage in Canal Beagle, see the Pilotage section for the port of Ushuaia in paragraph 9.27.

Caleta Awaikirr (55°00'S., 69°01'W.), on the S shore of Canal Beagle, is entered 3 miles SE of Punta Divide. It can be identified by a prominent white mark on a cliff on the W side of the entrance. Isote Observacion (55°01'S., 69°01'W.), which

lies in the entrance to the cove, is rocky and surrounded by kelp. A 4.9m shoal lies 0.2 mile NE of this islet. Anchorage for small vessels may be obtained in the middle of the cove, in a depth of 20m, 0.1 mile SSW of the islet.

Caleta Sonia, on the N side of Canal Beagle, is entered 2.5 miles N of Caleta Awaikirr. The E point of the cove is a sandy beach. Punta Yamana, the W entrance point to the cove, shows a light.

Anchorage, in a depth of 24m, sand, has been obtained off the cove with Punta Yamana Light bearing 265°, distant 0.4 mile. Small craft up to 60m in length can obtain sheltered anchorage close to the beach, in a depth of 16m, sand and mud, excellent holding ground. Local knowledge is required.

Bahia Yendegaia (54°54'S., 68°42'W.), on the N side of Canal Beagle, is entered E of Cabo Hyades. The bay extends 7 miles NW and is enclosed by mountains. The greater part of the bay is deep and clear of dangers. Caleta Contreras, on the W side of the bay, affords good anchorage for small vessels, in depths of 15 to 25m. Caleta Ferrari lies close to the head of the bay and affords anchorage for vessels of any size, in 30m, 0.1 to 0.2 mile off a mole located near some buildings and a sawmill. Caleta Dos de Mayo lies on the E side of the bay, about 2.5 miles E of Caleta Contreras. There is a small mole with a light at its head. Three light-colored army barracks stand near the mole. Anchorage is afforded, in a depth of 35m, N of the barracks. Depths of 8m are obtained 0.2 mile offshore.

9.23 Rocas Peron (54°56'S., 68°35'W.) lies 3.5 miles ESE of the entrance to Bahia Yendegaia, and consists of two islets with a rock, awash, between them, and surrounded by kelp. A light is shown on the SW islet. An area of foul ground, marked by kelp on its NE side, extends from a position 91m WNW of the light, in a WSW direction to the shore of Isla Hoste.

Caleta Peron lies on the S shore of Canal Beagle, about 2.2 miles E of Rocas Peron Light. There is an islet, on which there is a beacon, in the entrance to the cove. The W entrance point to the cove is also marked by a beacon. Anchorage for small vessels with local knowledge may be obtained, in a depth of 18m, 0.1 mile N of the islet. The anchorage is completely exposed to W winds blowing in Canal Beagle. There is a small mole, suitable for small vessels, at the head of the cove.

Bahia Almirante Saenz Valiente (54°53'S., 68°33'W.) lies 3 miles NNW of Caleta Peron. The bay is deep and free of dangers. There is a shoal patch, with a depth of 6.4m, marked by kelp, 183m N of the S entrance point. There are several buildings and a sawmill at the head of the bay. A beacon stands on the S entrance point and a second beacon stands on the N shore.

Anchorage for small vessels may be taken, in depths of 18 to 26m, 0.1 mile off the middle of the head of the bay. A second berth lies midway between the two entrance points in a depth of 31m, rock.

The bay should be approached from the SE, passing midway between areas of kelp extending from the respective entrance points. The kelp can be seen from a distance of about 0.3 mile. From a position within the bay, the approach to the anchorage leads W towards the houses at the head.

9.24 Bahia Lapataia, on the N shore of Canal Beagle, is entered between Punta Entrada (54°52'S., 68°31'W.) and a point

0.5 mile N. The bay is easily identified by two islets in the entrance. Isla Redonda, with a stone pyramid on its summit, lies 0.6 mile E of Punta Entrada and Islita Estorbo is located 0.5 mile E of Isla Redonda.

There are three passages into the bay. The W passage between Punta Entrada and Isla Redonda is reduced in width to 0.1 mile by a 3m shoal in the middle. The middle passage, between Isla Redonda and Islita Estorbo, is the recommended approach to the bay. The third passage, between Islita Estorbo and the mainland, is not recommended. A light is shown on the S shore close to the head of the bay.

Anchorage.—Anchorage is afforded, in depths of 26 to 31m, N of Isla Redonda. Vessels also anchor 1.25 miles WNW of Punta Entrada, in a depth of 26m, or near the head of the bay, 0.3 mile N of the light, in a depth of 18m.

Note.—The approximate boundary between Chile and Argentina lies about 3.3 miles W of Punta Entrada. The N side of Canal Beagle, from Bahia Lapataia E, is in Argentina.

9.25 Caleta Letier (54°56'S., 68°26'W.) lies on the S side of Canal Beagle, about 2.5 miles ESE of Caleta Peron. Anchorage may be obtained for small vessels with local knowledge, in 11m. Vessels may secure to the shore stern-to, abreast a cattle enclosure, in a depth of 10m.

Canal Murray connects Canal Beagle to Seno Ponsonby to the S. The N entrance to the canal is entered between Cabo Hahn and Cabo Mitchell. Islotes Campamento are a group of rocks and islets lying on the W side of the N entrance NW of Cabo Hahn. Islas Picapedreros are a group of rocks and small islands lying on the E side of the N entrance N of Cabo Mitchell. It was reported (2001) that several depths in the N section of Canal Murray are less than those charted.

The S entrance is between Isla Button and Isla Pauvre, 2.5 miles W. There are several rocks and islets near the shores of the canal, but apart from the dangers as seen on the chart, the center of the canal is generally clear. Puerto Corriente, a small cove on the W side of Canal Murray, affords anchorage out of the strong tidal current, but owing to its great depth is not recommended.

Islas Whaits (54°55'S., 68°22'W.) is a group of islands, islets, and rocks. The principal islands of the group are Isla Chicle, Isla Norte, and Isla Sur. Some of the islets and rocks are marked by beacons. Islas Whaits lie S of Canal Beagle channel. They can best be seen on the chart.

Puerto Navarino, where there is a small settlement, is a cove on the NW extremity of Isla Navarino. It is barely sheltered from NW winds and is approached from the E via Paso del Este, a passage with a least depth of 10m, and from the W via Paso del Oeste. Anchorage is afforded small vessels with local knowledge in poor holding ground. Because of the rocky bottom, anchorage in this area is not recommended.

Bahia Honda (54°55'S., 68°13'W.), a spacious bay, is entered between Islas Lawrence and Garcia, or between Islas Garcia and Paty. Both entrances are free of dangers. Two shoals, marked by kelp, are the only known dangers in the bay. Good anchorage is afforded large vessels in most parts of the bay. The recommended anchorage is in 42m, mud, pebbles and shells, good holding ground, 0.4 mile SE of the small islet off the E end of Isla Paty.

Islote Bartlett is a dark colored islet lying in mid-channel, about 1.8 miles N of Bahia Honda. A light is shown from the islet.

Peninsula Ushuaia extends about 1.3 miles S from the N side of Canal Beagle, about 4 miles NW of Islote Bartlett.

9.26 Bahia Ushuaia (54°49'S., 68°15'W.) lies on the N side of Canal Beagle, E of Peninsula Ushuaia. It is entered between Punta Oriental, the E extremity of the peninsula, and Punta Escarpados, 2.7 miles ENE. A light is shown from Punta Escarpados. The Rio Olivia and the Rio Grande flow into the bay. Montes Martial, which rise 4 miles inland and round the head of the bay, are prominent and always snow-capped. Monte Olivia 1,320m high, stands 4.2 miles NNE of Punta Escarpados and is prominent with a sharp pointed summit.

Islotes Les Eclaireurs (54°52'S., 68°05'W.), a small group of islets, lie in mid-channel 4.7 miles SE of Punta Escarpados. A light is situated on the NE islet of the group.

A chain of islands, islets, and shoals lie on the S side of Bahia Ushuaia, between Islotes Les Eclaireurs and Peninsula Ushuaia. The main entrance channel to the bay leads from the E, passing N of Islotes Les Eclaireurs. Three passages lead through the chain of islands, islets, and shoals, but are not recommended and should only be used by vessels with local knowledge. Lights are shown from some of the islets in the three passages.

Ushuaia (54°49'S., 68°18'W.)

[World Port Index No. 13980](#)

9.27 The port of Ushuaia is located at the head of Bahia Ushuaia and is also a navy base. This port is the southernmost port of Argentina and the South American continent.

Tides—Currents.—Tides rise about 1.6m at springs and 0.6m at neaps.

Aspect.—A causeway connects Punta Observatorio with Ushuaia on the NW shore of the bay. There are numerous lights and beacons about the bay which can best be seen on the chart. A prominent radio tower, 25m high, stands N of the city. Three radio masts stand at the Naval Air Station, about 0.3 mile W of Punta Observatorio. A monument, with a flagstaff close ESE, stands near the root of the commercial pier. Several prominent tanks stand along the shore in the vicinity of the tanker berth.

The commercial pier is situated on the NW of the bay and is built of cement. It is 180m long and is 12.3m wide. The addition of three inter-connected dolphins extends the overall mooring length to 250m on the S side and 378m on the N side. The depth is 5.4m at the shore end and 9.1m at the outer end of the pier. Vessels can berth on either side, each having certain advantages. On the S side, the SW winds hold the vessel to the pier. On the N side, in the event of a S gale, the vessel can cast off and clear the berth quicker. On the jetty, from which the pier extends at an angle of 140°, are Customs offices, warehouses, a storage yard, and a cold storage facility.

Close N of the commercial pier is a concrete pier 40m long and 30m wide, used by tankers to discharge to storage tanks ashore. Vessels berth starboard side-to and moor to two dolphins, one on either side of the pier. The depth of 12.1m allows

passenger cruise vessels to berth here during the summer season.

A number of mooring buoys are situated within the port and may be seen on the chart.

Pilotage.—Pilotage is compulsory. Pilots, which can be contacted by VHF channel 16 or 74, board, as follows:

1. Vessels approaching from the E—1.0 mile NNW of Isloles Les Eclaireurs Light.
2. Vessels approaching from the S and W—1 mile SSE of Isla Redonda.

Only Argentine pilots are permitted to take foreign vessels into Ushuaia. Since pilots have to travel from Buenos Aires, vessels should send ETA at least 48 hours in advance. Vessels from the N can arrange to embark the pilot at Puerto Madryn (42°47'S., 64°57'W.). Vessels from the Pacific, coming through Estrecho de Magallanes, can arrange to embark the pilot at Punta Arenas (53°10'S., 70°54'W.).

In the Beagle Channel, foreign vessels are under the Argentine-Chilean pilotage agreement. For navigating the channel W-bound, vessels should embark an Argentine pilot off Cabo San Pio (55°04'S., 66°32'W.). The Argentine pilot is disembarked and a Chilean pilot embarked at the meridian demarcating the Argentine and Chilean waters in the channel situated close W of Bahia Lapataia. For navigating the channel E-bound, vessels should embark a Chilean pilot W of Bahia Lapataia (54°52'S., 68°32'W.); the pilot may be disembarked near Isla Reparo (55°03'S., 66°49'W.), about 8 miles W of Cabo San Pio. This area is also used to exchange pilots during inclement weather.

It is reported that berthing without tugs can be difficult in anything but light winds.

Vessels entering or leaving Chilean waters through Canal Beagle without calling at any port between the meridians of 66°25'00.0"W and 68°36'38.5"W should embark or disembark Chilean pilots at the E end of Canal Beagle, about 2.5 miles N of Punta Waller (55°10'S., 66°34'W.), the N extremity of Isla Nueva. In bad weather, this transfer may be done in Rada Picton (55°04'S., 66°48'W.).

Vessels should fly from the foremast the flag of the country under whose pilot authority it is navigating under.

Anchorage.—The best anchorage is in a depth of 13m, sand and shells, 0.2 mile ESE of the head of the commercial pier. It is not advisable to anchor nearer to the Peninsula Ushuaia due to heavy squalls during SW gales.

Large vessels may anchor, in a depth of 24m, about 0.8 mile ESE of Punta Observatorio. Small vessels may anchor, in a depth of 7m, fine sand with good holding ground, about 0.2 mile NE of the head of the commercial pier.

Caution.—On the S side of the commercial pier, the SW winds tend to hold vessels alongside the berth. On the N side, in the event of a S gale, vessels may cast off and clear the berth quicker.

Canal Beagle—Isloles Eclaireurs to Cabo San Pio

9.28 Note.—For information on pilotage in Canal Beagle, see the Pilotage section for the port of Ushuaia in paragraph 9.27 above.

Puerto Mejillones (54°54'S., 68°00'W.) lies on the S side of Canal Beagle, 3.5 miles SE of Isloles Les Eclaireurs Light. Anchorage is afforded, in a depth of 25m, good holding ground, 0.2 mile SSW of the W extremity of Islole Panqueque, the SW of the two islets on the E side of the entrance to the cove. An indian village stands at the head of the cove.

Punta San Juan, on the N side of Canal Beagle, opposite Puerto Mejillones, shows a light. A prominent radio mast stands close E of the point.

Arrecife Lawrence (54°53'S., 67°52'W.) lies on the N side of Canal Beagle, 5 miles ESE of Punta San Juan. The reef is marked by kelp and lies with two rocks, awash, at its SE end. A light is shown on the SE rock of the reef. The light tower is visible a long distance by day and resembles the sail of a schooner when seen from a distance.

9.29 Punta Remolino (54°51'S., 67°53'W.) lies about 0.8 mile NNE of Arrecife Lawrence Light. Foul ground and a rock, awash, exist within 183m of the point, which is surrounded by kelp. A beacon stands on the point. The recommended berth for vessels is in a depth of about 23m, with Fondeadero Remolino Beacon bearing 008° and Remolino Beacon bearing 291°. Good anchorage can be obtained for small vessels 0.3 mile E of the point, in depths of 20 to 22m. There is a sawmill with a small jetty that small craft can moor alongside, 0.2 mile NE of the beacon.

Ensenada Villarino, on the S side of the canal, lies 5 miles SE of Punta Remolino. The bay affords good anchorage for small vessels, in a depth of 15m, in the center of the bay. The W coast of the bay is foul with rocks up to 0.2 mile offshore. An overnight stay is not recommended, due to the violent W winds which blow in from Canal Beagle.

Caleta Robalo (54°56'S., 67°39'W.), on the S side of the canal, lies 3 miles ESE of Ensenada Villarino. The cove provides two anchorages for small vessels with local knowledge. Neither of these anchorages are recommended. The outer anchorage is exposed to the prevailing winds and the inner anchorage is small and difficult to approach.

Banco Herradura, with a least depth of 1.2m over its N edge, extends 2.2 miles NE from the S shore of Canal Beagle, close W of Puerto Williams. The bank is particularly dangerous to vessels approaching from the E, as it is steep-to on its N and E sides and extends into the fairway. This bank has been reported to extend N of its charted position; also its W limit has been reported to lie 0.2 mile E of its charted location. A lighted beacon marks the N edge of the bank.

9.30 Puerto Williams (54°56'S., 67°36'W.) lies on the S shore of Canal Beagle, 2 miles E of Caleta Robalo. It is well-sheltered by Peninsula Gusano, a sandy spit forming its N entrance point. The port is used by vessels of the Chilean Navy, oil and gas tankers, and ocean-going fishing vessels.

Tides—Currents.—Tides rise about 2.4m at springs and 1.5m at neaps.

Depths—Limitations.—Muelle Guardian Brito, a T-head pier, extends 66m NNW from the shore. The head is 86m long and a hulk is moored off the W end to form a pontoon extension. The outer berth can accommodate vessels up to 86m long,

with a maximum draft of 9m. The inner berth can accommodate vessels up to 42m long, with a maximum draft of 4.5m.

Muelle Cavadonga, close W of Muelle Guardian Brito, extends 50m from the shore. There is a holding-off buoy moored about 91m NW of the pierhead. The outer berth can accommodate vessels up to 40m long, with a maximum draft of 4m. The inner berth can accommodate vessels up to 36m long, with a maximum draft of 2m.

Small piers extend from the S shore of Peninsula Gusano and the S shore of the harbor close W of Muelle Cavadonga. Seno Lautá, an inlet, lies at the SW corner of the harbor, but is suitable for only small craft.

A tanker berth lies in depths of about 17m NE of Muelle Guardian Brito. Vessels use two anchors and mooring buoys on each quarter.

Pilotage.—Pilotage is compulsory for foreign vessels. Pilots board about 1 mile NE of the light shown from the N extremity of Peninsula Gusano. The port can be contacted by VHF channel 9, 14, or 16.

Anchorage.—The port affords a good safe anchorage to vessels of all sizes. It is clear of dangers with an even bottom of mud and clay. Good anchorage may be found, in depths of 14.6 to 21.9m off the piers. A recommended berth is in a depth of 31m, with the light at Punta Gusano bearing 330°, distant about 0.3 mile.

9.31 Paso Mackinlay (54°55'S., 67°28'W.) is entered between Punta Piedrabuena to the S and Punta Gable, about 1 mile N. The pass has a least navigable width of 0.6 mile between the foul ground extending from the SW side of Isla Gable and Punta Piedrabuena. In the pass the current flows from W to E and is superimposed on the tidal currents, causing an E current of 1 to 3 knots. A mid-channel course should be steered through Paso Mackinlay. Leading lights, in line bearing 140°, stand on Punta Piedrabuena.

Isla Gable forms the N side of Paso Mackinlay. The island extends 4.5 miles E between Punta Gable and Punta Mackinlay, the SE extremity of the island. Leading lights, in line bearing 090°, stand on the W coast of the island, about 0.8 mile N of Punta Gable. Lights are shown on Punta Espora and Punta Mackinlay.

Puerto Gable (54°53'S., 67°25'W.) lies on the NE side of Isla Gable, 1.5 miles NNW of Punta Mackinlay. The cove affords anchorage for small craft, in depths of 5 to 7m. An emergency airstrip is situated 1 mile N of Puerto Gable.

9.32 Punta Rosales (54°55'S., 67°27'W.) lies on the S side of Paso Mackinlay, 1.5 miles SW of Punta Mackinlay. Leading lights, in line bearing 100°, stand near the point. Reports have stated that a set of beacons, in line bearing 250°, have also been established on the point. Caleta Pantalón del E, 1 mile SW of the point, can only be used by small craft.

Isla Martillo lies 1.7 miles SE of Puerto Gable, on the N side of Canal Beagle. A light is shown on the SE corner of the island. Between the island and the N shore of the canal, there are several islets and rocks, the positions of which can best be seen on the chart. Isla Yunque lies 1.5 miles NE of Isla Martillo.

Two good anchorages can be obtained in this area in the event of strong W winds. The first anchorage lies 0.5 mile W of

Harberton Beacon (54°53'S., 67°19'W.) in a depth of 15m. The second anchorage is 1.2 miles farther SW in Rada de los Cazadores, in a depth of 11m, midway between Isla Yunque and Isla Martillo. When approaching the second anchorage, care must be taken to avoid a 5.5m patch WSW of the SW extremity of Isla Yunque.

Puerto Harberton (54°53'S., 67°19'W.) lies on the N shore of Canal Beagle and is entered 0.4 mile W of Ponsati Light. A beacon stands on the W entrance point. There are two leading beacons at the head of the harbor. A second pair of beacons stand on the W coast of the inlet. A village, near a stone jetty, stands on the W coast.

Anchorage.—The recommended berth, in a depth of 15m, mud and sand, is on the leading line about 0.5 mile within the entrance. The position is marked by the alignment (263°) of a pair of beacons, 4m high, standing on the W shore.

Small craft can anchor 91m off the jetty, in a depth of 10m.

Caution.—When approaching Puerto Harberton from the E in thick weather, care must be taken to identify Harberton Beacon on the W entrance point, to avoid confusion with the entrance to Bahías Varela or Cambaceres to the E.

9.33 Puerto Eugenio (54°56'S., 67°18'W.) lies on the S side of Canal Beagle and is entered between Punta Eugenio and Isla Barlovento, which shows a light. Large vessels should anchor in the E part of the bay, abreast Punta Eugenio, in 22m. Small vessels can anchor in the W part of the bay, opposite the buildings of a hacienda, in a depth of 15m. Vessels entering should keep mid-channel between the NW islet of Islotes Eugenio and the shoal area, marked by kelp, off the E end of Isla Barlovento. Puerto Eugenio is considered one of the best anchorages in the vicinity.

Grupo Holger is a group of islets and rocks off the S shore of Canal Beagle, 3 miles W of Isla Snipe. A 8.2m patch lies 0.4 mile NNE of the NW extremity of the group. Two islets marked by kelp and a 14.6m shoal lies in the middle of the bay between Grupo Holger and Punta Eugenio.

Isla Snipe (54°57'S., 67°09'W.) lies about 3 miles E of Grupo Holger. A shoal, with a depth of 5.9m and marked by a lighted buoy and kelp, lies 1 mile N of the island. Another shoal, with a depth of 8.5m (position approximate), lies 1.2 miles further NW. The NNE side of the island should be given a wide berth as dangerous shoals, marked by kelp, lie as much as 1 mile offshore. There are other shoals N and S of the island and can best be seen on the chart.

Paso Picton lies between Isla Picton and the NE side of Isla Navarino. The pass has a least width of 2 miles. Two rocks, awash, lie close together in mid-channel 2 miles ENE of Cabo Rees (55°06'S., 67°04'W.). There are several dangers at the NW entrance to the pass.

9.34 Puerto Piedra (55°02'S., 67°02'W.) lie on the W side of Isla Picton, 2.7 miles NNE of Cabo Rees. The cove affords anchorage, in depths of 7 to 9m, but the holding ground is bad and no vessel should remain overnight. There is a small wooden pier at the head of the cove.

Puerto Toro is a cove on the SW side of Paso Picton, 1 mile NW of Cabo Rees. The cove is free of dangers and the holding ground is good. A settlement consisting of a few houses is situated nearby. Puerto Toro Light is exhibited on the SE en-

trance point. Anchorage may be obtained in the middle of the cove, in depths of 25 to 32m, 0.1 to 0.2 mile offshore.

A metal pier, 60m long and with a depth of 2.5m at its head, projects from the head of the cove.

Caleta Banner (55°01'S., 66°56'W.) is a small snug inlet on the N side of Isla Picton. It is well-sheltered from the N by Isla Gardiner, an islet close off the entrance. Small vessels, with local knowledge, may obtain good anchorage in the middle of the cove in a depth of 6m. Larger vessels can anchor off the cove in a depth of 18m, with the NE extremity of Isla Gardiner bearing 315°, distant 0.2 mile. Another good anchorage, protected from E and S winds, is in a depth of 29m, with Isla Gardiner Light bearing 110°, distant about 0.8 mile.

A look-out post is maintained at Caleta Banner which is in radio contact with the mainland. There is a pier for the use of small craft.

Rada Picton lies off the E side of Isla Picton, mid-way between Cabo Maria and Punta Nordeste (55°02'S., 66°52'W.). The roadstead affords anchorage, in depths of 18 to 29m, 1 mile offshore. Small vessels can anchor, in depths of 11 to 12m, 0.7 mile offshore, 2.5 miles N of Cabo Maria.

9.35 Islote Alvina (Hakenyeshka) (54°54'S., 67°10'W.) is surrounded by kelp and lies 2 miles WNW of Pampa de Los Indios Light. Shoal water extends up to 1 mile SW and SE of the island. Islas Becasses are two islets in mid-channel and lie about 2.2 miles N of the N extremity of Isla Picton. A light is shown on the W islet.

Fondeadero Moat lies on the N side of Canal Beagle, 3.5 miles NW of Punta Moat (55°01'S., 66°44'W.). Vessels can obtain anchorage, in depths of 9 to 18m, 0.2 mile SSE of a small point. Although the holding ground is good, the anchorage is exposed to the prevailing winds, and a stay overnight is not recommended. A beacon stands on the point NW of the anchorage. There is a slight ENE current in the anchorage. A light is shown from Punta Moat.

Cabo San Pio (55°04'S., 66°32'W.) lies 7.2 miles ESE of Punta Moat. A light is shown on the point. A rock, awash, with a breaker 183m SE of it, lies about 0.2 mile SE of the light. There is an anchorage, in a depth of 24m, with the light bearing 032°, distant about 0.3 mile. The anchorage is clear, but should not be used during fresh SW winds, which raise a heavy sea.

Note.—For information concerning waters E of a line from Cabo San Pio to Falso Cabo de Hornos (55°43'S., 68°04'W.), see Pub. 124, Sailing Directions (Enroute) East Coast of South America.

Cabo San Pio to Seno Ponsonby

9.36 Bahia Oglander (55°09'S., 66°56'W.) lies about 15 miles SW of Cabo San Pio. The bay is bounded by Isla Nueva to the E, Isla Lennox to the S, Isla Picton to the N, and Isla Navarino to the W. Navigation in the bay presents no difficulty except between Cabo Maria, the SW extremity of Isla Picton, and Punta Jorge, the NW extremity of Isla Nueva. A thick patch of kelp extends 5 miles SE from Cabo Maria, and depths of less than 11m, lie within 3.5 miles from the cape, the least depth being 7m near the outer end. Depths of less than 18.3m lie up to 2.5 miles NW of Punta Jorge.

Paso Goree lies in the SW entrance to Bahia Oglander, between Islas Lennox and Navarino. The pass is about 3 miles wide and affords a well-sheltered anchorage. Isla Medio lies near mid-channel, 2 miles off the W coast of Isla Lennox. Anchorage may be obtained between Isla Medio and Punta Anchor, 3 miles NW, where the depths are moderate and the holding ground is good.

Isla Navarino (55°05'S., 67°43'W.), one of the largest of Archipiélago de Tierra Del Fuego, lies S of Canal Beagle. From Cabo Rees, it extends 45 miles W to Cabo Mitchell, and is 20 miles wide. The island is very mountainous, and the summits are usually snow-capped. Pico Navarino, its highest peak, lies near the center of the island towards the N side.

Bahia Nassau lies between Isla Navarino to the N and Islas Wollaston to the S. It extends to the NW through Seno Ponsonby and Canal Murray to Canal Beagle. The bay has a number of anchorages on each side.

Caution.—A local magnetic anomaly in the bay affects the magnetic compass, which becomes very sluggish and serious errors may occur if the compass is not carefully watched.

9.37 Bahia Windhond (55°14'S., 67°30'W.) lies on the S side of Isla Navarino and is entered between Punta Harvey and Punta Courrejolles. The bay has moderate depths, but is exposed to the prevailing winds. Vessels with local knowledge can anchor off Puerto Bevan, on the E side of the bay, in a depth of 20m. A beacon stands on the S point of the cove. Fondeadero Oreste affords anchorage close off the W shore of Bahia Windhond.

Isla Bertrand lies on the S coast of Isla Navarino, about 12 miles W of Bahia Windhond. The island lies in the entrance to Seno Grandi, which is extensive but incompletely surveyed. Puerto Grandi, on the NE end of the island, affords anchorage to vessels with local knowledge in moderate depths, good holding ground.

Caleta Douglas (55°10'S., 68°07'W.) lies on the W coast of Isla Navarino. The Rio Douglas flows into the head of the cove. There is a prominent white stone on the S entrance point of the river.

Anchorage, in a depth of 20m, sand, good holding ground, can be obtained with the NW entrance point of the cove bearing 348°, distant 0.5 mile. A shoal, with a depth of 4m and marked by kelp, lies 0.1 mile S of the NW entrance point. Vessels should approach with the white stone bearing 076°.

The Rio Douglas has a depth of 2m at its mouth and can only be entered by boats.

Caleta Wulaia lies on the W coast of Isla Navarino and is entered between Islote Conejos and Islote Aguila. The cove is a good sheltered harbor for small craft with local knowledge. A settlement, with a small jetty, lies on the shore of the cove. Two pairs of beacons mark the anchorage.

9.38 Isla Button (55°01'S., 68°15'W.) lies in the S entrance to Canal Murray at the N end of Seno Ponsonby. Bahia Catorce de Julio is a cove on the E side of the island. It affords anchorage for small vessels with good holding ground. Roca Schirmer, with a depth of 1m, marked by a buoy, lies 0.6 mile E of the NE point of Isla Button. A chain of rocks and islets extend 1.7 miles SSE from the S end of the island, terminating in Isla Lobos, which is marked by a beacon.

Isla Milne Edwards is separated from Peninsula Pasteur to the SW by Canal Canacus, which leads from the NW part of Bahia Nassau to the W arm of Seno Ponsonby. Passage through Canal Canacus should not be attempted without local knowledge. Caleta Canacus lies on the S side of the canal and affords anchorage to medium-sized vessels, in a depth of 26m.

Puerto Castillo (55°15'S., 68°16'W.) lies on the E side of Peninsula Pasteur. Anchorage in the cove affords complete shelter to small vessels with local knowledge, in depths of 20 to 30m. It is approached from the S through a channel, with a depth of 12.8m, between Peninsula Pasteur and an islet close E. A depth of 4m lies close N of the anchorage.

Seno Ponsonby lies NW of Bahia Nassau and is connected with Canal Beagle by Canal Murray. An arm of Seno Ponsonby extends W for 26 miles S of Peninsula Dumas, and is separated from Caleta Awaikirr by a low and narrow isthmus. The W arm is deep, but should not be entered without local knowledge. Caleta Yekadahby lies on the N side of the W arm and affords anchorage to small vessels with local knowledge. Bahia Lagrese, also on the N shore, affords anchorage in a depth of 26m, but there is very little swinging room. Bahia Helada, at the head of the W arm, is the only other known anchorage, but it is icebound at times.

Bahia Tekenika to Seno Ano Nuevo

9.39 Bahia Tekenika (55°21'S., 68°15'W.), lying between Peninsula Pasteur and Peninsula Hardy, extends W for about 20 miles. The greater part of the bay is deep, but the head is shoal. Bahia Allen Gardiner lies on the S side of Bahia Tekenika and affords anchorage, in a depth of 16m, 0.5 mile from the head of the bay.

Bahia Packsaddle lies on the NE side of Peninsula Hardy. The bay is sheltered from N and E winds by Isla Packsaddle and Grupo Guffern. Bahia Scotchwell forms the head of Bahia Packsaddle. Anchorage is recommended between Grupo Guffern and the W shore, but nearer the latter, in depths of 15 to 24m. Care is necessary to avoid the kelp patches which indicates where the bottom is rocky.

Bahia Orange (55°31'S., 68°03'W.) lies about 3.5 miles SSE of Bahia Packsaddle. Isla Burnt lies in the middle of the bay. A beacon stands on an islet close off the SE side of Isla Burnt. A rock shoal, with a depth of 1m, and a depth of 7.6m close SW of it, lie midway between Isla Burnt and Isla Yellow, 1 mile SE. The shoal is marked on its N side by a buoy.

There is an excellent anchorage between Isla Burnt and the W shore, in depths of 18 to 29m. Smaller vessels can anchor close within the entrance of Caleta Mission, in a depth of 14m, mud, with a flagstaff on the E end of a pier bearing 260° and with Punta Lephay bearing 157°. A cove on the S side of Bahia Orange, 1 mile SE of Caleta Mision, also affords good anchorage to small vessels, in depths of 9 to 29m.

Bahia Schapenham lies about 1 mile SSE of Isla Yellow. Two remarkable peaks of Cadena de Las Garitas, which resemble sentry boxes, are prominent W of the bay. A black above-water rock lies near the middle of the entrance to the bay. Vessels with local knowledge can obtain anchorage, in depths of 18 to 27m, near the S entrance point.

9.40 Bahia Rice (55°36'S., 67°59'W.), the N of two small bays, is entered between the S entrance point of Bahia Schapenham and Punta Lort, 2.2 miles S. There is an anchorage, which is completely land-locked and safe, in a depth of 11m, W of a small islet in the middle of the bay.

Bahia Lort is entered between Punta Lort and Punta Cannelier, 2 miles S. Caleta del Medio, a small cove, lies on the W side of the bay. Anchorage can be taken 0.2 mile from the shore off the cove, in a depth of 26m, sand. Small craft anchor, in depths of 8 to 16m, midway between the W side of Isote Orques and the SW entrance point of a cove N of Caleta del Medio.

Falso Cabo de Hornos (55°43'S., 68°04'W.), the S extremity of Peninsula Hardy and of Isle Hoste, terminates in a rocky and sharp pointed islet, shaped like a rhinoceros horn, at the foot of which there are many rocks, with heavy breakers. The cape has some resemblance to Cabo de Hornos, for which it has frequently been mistaken.

Note.—For information concerning waters E of a line from Falso Cabo de Hornos to Cabo San Pio (55°04'S., 66°32'W.), see Pub. 124, Sailing Directions (Enroute) East Coast of South America.

Off-lying Islands

9.41 Islas Diego Ramirez (56°30'S., 68°42'W.), a chain of islets and rocks in the N part of Drake Passage, extends 5.5 miles S from a position approximately 56 miles SSW of Cabo de Hornos. They were reported to lie 3.5 miles NE of their charted position. They are divided into two groups, separated by a navigable passage 1 mile wide. All the outer rocks are above-water, and there are no known underwater dangers. The largest of the N group is Roca Norte. The N group extends 1.2 miles and consists of six islets, high enough to be visible a considerable distance, and numerous rocks.

Isla Bartolome, in the S group, lies 2.5 miles S of Roca Norte and is the largest island. Isla Gonzalo is close S of Isla Bartolome and separated from it by Canal Nodal, a boat channel. It was reported that a light is shown from a tower, 5m high, standing on Isla Gonzalo. Some detached above-water rocks lie about 1 mile SE of Isla Gonzalo (56°32'S., 68°44'W.). The islands are usually inhabited during the season of moderate weather. Anchorage may be obtained close E of the middle of Isla Bartolome, 0.1 mile from the shore, in a depth of 29m, sand. A landing can be effected in Caleta Condell, a small cove on the NE side of Isla Gonzalo, where there is a meteorological station. There is also anchorage 0.5 mile E of the SE point of Isla Bartolome, in 33m, sand.

Islas Ildefonso (55°51'S., 69°15'W.) whose positions are approximate, extend 3.5 miles SE from a position 52 miles W of Isla Hermite. These islets and rocks appear to be the top of a narrow mountain range, broken in many places by the sea. Vessels can pass moderately close to them. The islands are usually inhabited during the season of moderate weather.

Bahia Tekenia to Seno Ano Nuevo (continued)

9.42 Cabo Payen (55°38'S., 68°15'W.), 9 miles NW of Falso Cabo de Hornos, is the SW end of a promontory which separates

Bahia del Sur from Bahia Bourchier. Both of these bays are encumbered with islets and rocks, and are useless to shipping.

Canal Romanche lies 14.5 miles NW of Cabo Payen. The canal separates a number of islands and islets from Peninsula Hardy. The canal is 0.5 mile wide at its narrowest part, and clear of dangers. It affords two good anchorages to vessels with local knowledge, sheltered from SW winds. Caleta Coralie, on the SE side of the canal, affords a temporary anchorage to small vessels, in depths of 22 to 26m.

Seno Ano Nuevo lies between the W side of Peninsula Hardy and the E side of Peninsula Rous, the SW part of Isla Hoste. It extends 20 miles NNW, and is encumbered with numerous islands and islets. The inlet branches into five main arms, which are very deep, but mostly terminate in coves where a vessel could moor. Local knowledge is necessary. Arrecife Peligroso, a dangerous reef which breaks in heavy seas, lies 2 miles S of Cabo Brisbane (55°39'S., 69°00'W.).

9.43 Bahia India (55°28'S., 69°10'W.) lies at the SE end of Peninsula Rous and is entered two miles N of Isla Golddust. There is a low islet off the N side of the entrance to the bay. Anchorage in the bay is not recommended, as the bottom is rocky and the water deep.

Estero Doze, the S arm on the E side of Seno Ano Nuevo, is entered about 9 miles NNE of Isla Henderson. There is a large basin at the head of the inlet which affords an excellent anchorage.

Isla Morton (55°35'S., 69°12'W.) is the largest of Islas Morton, a group of islands and islets, located 3.5 miles W of Isla Henderson. The island has two anchorages on its E side, but the water is very deep and they are not recommended. In the passage between Islas Morton and Henderson are many rocks and kelp, making navigation dangerous. Bahia Clearbottom, at the N end of Isla Morton, is small and not recommended.

Isla Dumont d'Urville occupies the center of Seno Ano Nuevo, with Isla Mouchex close NW of it. Isla Paques is an islet off the NW end of Isla Mouchex, and affords a well-sheltered anchorage on its W side.

Isla Hind to Bahia Cook

9.44 Isla Hind (55°31'S., 69°20'W.) lies off the S coast of Peninsula Rous. Monte Leading, in the E part of the island, has a remarkable double peak which resembles a mitre. Bahia Wyatt, on the SE side of the island, affords better shelter than Bahia Clearbottom, but it is exposed to S winds. Neither Seno Rous nor Bahia Trefusis to the W of Isla Hind affords anchorage.

Paso Talbot separates Islas Wood from Peninsula Rous, and has a least width of 0.3 mile. There are many islets, rocks, and inlets in it, especially in the SE entrance. Passage through should not be attempted without local knowledge. Caleta Angot lies at the SE entrance to the pass and cannot be recommended as an anchorage, as the bottom is irregular and rocky.

Puerto March (55°20'S., 69°58'W.), on the E side of Isla Waterman, is entered 3 miles NE of the S point of the island and 0.7 mile W of Isla Shag. The S shore of the cove is formed by an island, with a channel having a depth of 9m between it and Isla Waterman. The best anchorage is 0.1 mile NNW of an islet in the middle of the cove toward its head, in depths of 16 to 25m, with good holding ground. Vessels can anchor in other parts of the cove, but there are several dangers. It is recommended that vessels should not enter the cove without local knowledge.

Puerto Clerke, entered 1 mile N of Puerto March, extends 1.7 miles to the W and is narrow. The approach from the N is encumbered by rocks and the coast of Isla Shag should be kept close aboard until abreast the entrance, when the S shore of the inlet should be closed. Vessels should anchor in the inner part of the cove, in depths of 14 to 32m, good holding ground. Vessels should not enter without local knowledge.

9.45 Estero Webb (55°14'S., 69°39'W.) is a large inlet lying between Peninsula Rous and Peninsula Cloue. It is entered 2.5 miles N of Isla Goose at the NW end of Paso Talbot, and extends 13 miles NE. The inlet consists of two arms. One extends NE while the other extends E.

Islas Christmas, off the W side of Peninsula Cloue, are a group of islands, islets, and rocks. The principal islands are Isla Shag, Isla Waterman, Isla Hammond, and Isla Whittlebury. Isla Waterman, the largest island, can be identified from seaward by its remarkable height. Rocas Cabrestante, the most seaward of Islas Christmas, lie 6.5 miles W of the S extremity of Isla Waterman. Vessels passing W of these rocks are advised to give them a berth of 5 miles.

Seno Christmas (55°16'S., 70°00'W.) is the continuation of Paso Talbot for 12 miles WNW, and leads into Bahia Cook by a narrow, but deep channel. The fairway is close to the S shore of the channel, as the N shore is studded with islets and rocks. Rocas Negra Chica, which are two rocks close together with depths of less than 2m, and Roca Negra Grande, which is always above-water, lie in the S approach to the SE entrance. There are no other known dangers in this part of Seno Christmas, except for some submerged rocks off Roca Negra Grande, which are marked by breakers.